

# WEST Search History

DATE: Tuesday, September 30, 2003

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>			
L4	5556776	4	L4
L3	L2 with sucrose	1	L3
L2	pts near3 ii	6223	L2
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L1	pts near3 ii	694	L1

END OF SEARCH HISTORY

WEST

[Generate Collection](#)[Print](#)

## Search Results - Record(s) 1 through 4 of 4 returned.

 1. Document ID: US 20030049804 A1

L4: Entry 1 of 4

File: PGPB

Mar 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030049804

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030049804 A1

TITLE: Corynebacterium glutamicum genes encoding metabolic pathway proteins

PUBLICATION-DATE: March 13, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Pompejus, Markus	Freinsheim		DE	
Kroger, Burkhard	Limburgerhof		DE	
Schroder, Hartwig	Nussloch		DE	
Zelder, Oskar	Speyer		DE	
Haberhauer, Gregor	Limburgerhof		DE	
Kim, Jun-Won	Seoul		KR	
Lee, Heung-Shick	Seoul		KR	
Hwang, Byung-Joon	Seoul		KR	

US-CL-CURRENT: 435/115; 435/183, 435/252.3, 435/320.1, 435/69.1, 536/23.2[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KOMC](#) | [Draw Desc](#) | [Image](#) 2. Document ID: US 5556776 A

L4: Entry 2 of 4

File: USPT

Sep 17, 1996

US-PAT-NO: 5556776DOCUMENT-IDENTIFIER: US 5556776 A

TITLE: Sucrase gene derived from coryneform bacteria

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KOMC](#) | [Draw Desc](#) | [Image](#) 3. Document ID: EP 724017 A2 BR 9600268 A FR 2729970 A1 SK 9600112 A3 JP

08196280 A ZA 9600656 A EP 724017 A3

L4: Entry 3 of 4

File: DWPI

Jul 31, 1996

DERWENT-ACC-NO: 1996-343532

DERWENT-WEEK: 199806

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Sucrase gene from Coryneform bacteria - used to prepare recombinant microorganisms for improved prodn. of L-amino acids and nucleic acids by fermentation of sucrose

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)

[View](#) | [Draw Desc](#) | [Clip Img](#) | [Image](#)

4. Document ID: JP 05244958 A JP 3298135 B2 US 5556776 A

L4: Entry 4 of 4

File: DWPI

Sep 24, 1993

DERWENT-ACC-NO: 1993-338924

DERWENT-WEEK: 200246

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: New sucrase gene derived from Coryneform sp. - has restriction enzyme cleaving site, and encodes sucrase activity

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)

[View](#) | [Draw Desc](#) | [Image](#)

[Generate Collection](#)

[Print](#)

Terms	Documents
5556776	4

**Display Format:**

[Previous Page](#)      [Next Page](#)

## Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID: ssspta1800exs

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* \* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 SEP 09 CA/CPlus records now contain indexing from 1907 to the present  
NEWS 4 Jul 15 Data from 1960-1976 added to RDISCLOSURE  
NEWS 5 Jul 21 Identification of STN records implemented  
NEWS 6 Jul 21 Polymer class term count added to REGISTRY  
NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available  
NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective August 1, 2003  
NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN  
NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in September 2003  
NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in September 2003  
NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in September 2003  
NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in September 2003  
NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE  
NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL  
NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right Truncation  
NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR  
NEWS 18 SEP 22 DIPPR file reloaded  
NEWS 19 SEP 25 INPADOC: Legal Status data to be reloaded  
NEWS 20 SEP 29 DISSABS now available on STN  
  
NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS INTER General Internet Information  
NEWS LOGIN Welcome Banner and News Items  
NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* STN Columbus \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

FILE 'HOME' ENTERED AT 21:07:10 ON 30 SEP 2003

=> fil .eliz

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

0.21

0.21

FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 21:07:27 ON 30 SEP 2003

FILE 'SCISEARCH' ENTERED AT 21:07:27 ON 30 SEP 2003

COPYRIGHT 2003 THOMSON ISI

FILE 'LIFESCI' ENTERED AT 21:07:27 ON 30 SEP 2003

COPYRIGHT (C) 2003 Cambridge Scientific Abstracts (CSA)

FILE 'BIOTECHDS' ENTERED AT 21:07:27 ON 30 SEP 2003

COPYRIGHT (C) 2003 THOMSON DERWENT AND INSTITUTE FOR SCIENTIFIC INFORMATION

FILE 'BIOSIS' ENTERED AT 21:07:27 ON 30 SEP 2003

COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC. (R)

FILE 'EMBASE' ENTERED AT 21:07:27 ON 30 SEP 2003

COPYRIGHT (C) 2003 Elsevier Inc. All rights reserved.

FILE 'HCAPLUS' ENTERED AT 21:07:27 ON 30 SEP 2003

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'NTIS' ENTERED AT 21:07:27 ON 30 SEP 2003

Compiled and distributed by the NTIS, U.S. Department of Commerce.

It contains copyrighted material.

All rights reserved. (2003)

FILE 'ESBIOBASE' ENTERED AT 21:07:27 ON 30 SEP 2003

COPYRIGHT (C) 2003 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'BIOTECHNO' ENTERED AT 21:07:27 ON 30 SEP 2003

COPYRIGHT (C) 2003 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'WPIDS' ENTERED AT 21:07:27 ON 30 SEP 2003

COPYRIGHT (C) 2003 THOMSON DERWENT

=> s pts (3a) ii  
L1 9200 PTS (3A) II

=> s l1 (5a) sucrose  
L2 20 L1 (5A) SUCROSE

=> dup rem l2  
PROCESSING COMPLETED FOR L2  
L3 7 DUP REM L2 (13 DUPLICATES REMOVED)

=> d 1-7

L3 ANSWER 1 OF 7 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN  
AN 2001-06288 BIOTECHDS  
TI Gene encoding sucrose phosphoenolpyruvate-sugar transport system enzyme  
II obtained by cassette ligation-mediated amplification of downstream  
domain of Coryneform bacterium sucrase gene, with sucrose-binding  
activity;  
involving polymerase chain reaction  
AU Izui M; Sugimoto M; Nakamatsu T; Kurahashi O  
PA Ajinomoto  
LO Tokyo, Japan.  
PI WO 2001002584 11 Jan 2001  
AI WO 2000-JP4348 30 Jun 2000  
PRAI JP 1999-189512 2 Jul 1999  
DT Patent  
LA Japanese

OS WPI: 2001-138150 [14]

L3 ANSWER 2 OF 7 MEDLINE on STN DUPLICATE 1  
AN 2000427132 MEDLINE  
DN 20391269 PubMed ID: 10937490  
TI Analysis of a catabolic operon for sucrose transport and metabolism in Clostridium acetobutylicum ATCC 824.  
AU Tangney M; Mitchell W J  
CS Department of Biological Sciences, Heriot-Watt University, Riccarton, Edinburgh, UK.. m.tangney@hw.ac.uk  
SO JOURNAL OF MOLECULAR MICROBIOLOGY AND BIOTECHNOLOGY, (2000 Jan) 2 (1) 71-80.  
Journal code: 100892561. ISSN: 1464-1801.  
CY ENGLAND: United Kingdom  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
OS GENBANK-AF205034  
EM 200009  
ED Entered STN: 20000922  
Last Updated on STN: 20030325  
Entered Medline: 20000908

L3 ANSWER 3 OF 7 MEDLINE on STN DUPLICATE 2  
AN 94114598 MEDLINE  
DN 94114598 PubMed ID: 8286440  
TI Evidence for a phosphoenolpyruvate dependent sugar-phosphotransferase system in the mollicute *Acholeplasma florum*.  
AU Navas-Castillo J; Laigret F; Hocquellet A; Chang C J; Bove J M  
CS Laboratoire de biologie cellulaire et moleculaire, Institut National de la Recherche Agronomique et Universite de Bordeaux II, Villenave d'Ornon, France.  
SO BIOCHIMIE, (1993) 75 (8) 675-9.  
Journal code: 1264604. ISSN: 0300-9084.  
CY France  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
OS GENBANK-Z19057  
EM 199402  
ED Entered STN: 19940312  
Last Updated on STN: 19940312  
Entered Medline: 19940223

L3 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN  
AN 1989:471946 HCAPLUS  
DN 111:71946  
TI Genetics of the phosphotransferase system of *Bacillus subtilis*  
AU Fouet, A.; Arnaud, M.; Klier, A.; Rapoport, G.  
CS Inst. Pasteur, Paris, 75724, Fr.  
SO FEMS Microbiology Reviews (1989), 63(1-2), 175-82  
CODEN: FMREE4; ISSN: 0168-6445  
DT Journal; General Review  
LA English

L3 ANSWER 5 OF 7 LIFESCI COPYRIGHT 2003 CSA on STN DUPLICATE 3  
AN 88:19244 LIFESCI  
TI Mechanisms of sugar transport in the rumen bacterium *Selenomonas ruminantium*.  
AU Martin, S.A.; Russell, J.B.  
CS Anim. and Dairy Sci. Dep., Livest.-Poult. Build., Univ. Georgia, Athens, GA 30602, USA  
SO J. GEN. MICROBIOL., (1988) vol. 134, no. 3, pp. 819-827.  
DT Journal  
FS J  
LA English  
SL English

L3 ANSWER 6 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
AN 1967-09968G [00] WPIDS  
TI Stabilised nitrofurazone compns.  
DC B00 C00  
PA (ROGA) ROGAR LTD  
CYC 1  
PI CA 763930 A (196800)\*  
PRAI CA 1964-897914 19640313

L3 ANSWER 7 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
AN 1966-28322F [00] WPIDS  
TI Stabilised nitrofurazone compns.  
DC B00 C00  
PA (ROGA) ROGAR LTD  
CYC 1  
PI CA 763930 A (196800)\*  
PRAI CA 1964-897914 19640313

=> d 1-7 kwic

L3 ANSWER 1 OF 7 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN  
AB . . . glucose only or sucrose, and can have improved amino acid and nucleic acid productivity. In an example, the gene encoding sucrose PTS enzyme II was isolated from the chromosomal DNA of *Brevibacterium lactofermentum* AJ2036 (FERM BY-734) by Southern hybridization. Then, transformants with sucrose PTS enzyme II gene and with disruption of such gene were constructed for production of glucose and sucrose, indicating that AJ12036 produced both. . .

L3 ANSWER 2 OF 7 MEDLINE on STN DUPLICATE 1  
AB . . . encoding the proteins of this pathway were identified from the *C. acetobutylicum* genome sequence, in the order scrAKB encoding Enzyme II of the sucrose PTS, fructokinase and sucrose 6-phosphate hydrolase respectively. While the pathway for sucrose metabolism is conserved between *C. acetobutylicum* and *C. beijerinckii*, the operons show. . .

L3 ANSWER 3 OF 7 MEDLINE on STN DUPLICATE 2  
AB . . . but not a glucose-PTS, and that the amino acid sequence deduced from the DNA fragment is related to beta-glucoside and sucrose enzymes II of PTS from various bacteria.

L3 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN  
AB . . . distribution of phosphotransferase system (PTS)-sugars in *B. subtilis*, enzyme components of the PTS, and the amino acid sequences of three PTS enzymes II involved in sucrose metab.

L3 ANSWER 5 OF 7 LIFESCI COPYRIGHT 2003 CSA on STN DUPLICATE 3  
AB . . . phosphorylate glucose and sucrose. Glucose activity was constitutive, while phosphorylation of sucrose was inducible. Competition experiments indicated that separate phosphotransferase (PTS) enzymes II were present for glucose and sucrose, but it appeared that maltose was hydrolysed by an inducible extracellular maltase and then transported by the glucose PTS. S.. .

L3 ANSWER 6 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
AB . . . esp. for addn. to poultry drinking water.  
(II) is pref. Pluronic F-68 of av. mol. wt. 8750. Carriers include dextrose, lactose and sucrose. Typically at least 1 pt. (II) mixed with 20 pts. (I).

L3 ANSWER 7 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN  
AB . . .

esp. for addn. to poultry  
drinking water.

(II) is pref. Pluronic F-68 of av. mol. wt. 8750. Carriers include dextrose, lactose and **sucrose**. Typically at least 1 pt. (II) mixed with 20 pts. (I).

=> d 3-5 ab

L3 ANSWER 3 OF 7 MEDLINE on STN DUPLICATE 2  
AB In order to confirm the presence of a phosphoenolpyruvate (PEP)-dependent sugar-phosphotransferase system (PTS) in the mollicute Acholeplasma florum we studied the ability of cell free extracts of this organism to phosphorylate glucose and/or fructose in the presence of PEP. We also cloned and sequenced a DNA fragment coding for a putative polypeptide showing significant similarity with the enzyme II of the beta-glucoside PTS of Escherichia coli. Taken together, these results show that A florum possesses a fructose-PTS, but not a glucose-PTS, and that the amino acid sequence deduced from the DNA fragment is related to beta-glucoside and **sucrose** enzymes **II** of **PTS** from various bacteria.

L3 ANSWER 4 OF 7 HCPLUS COPYRIGHT 2003 ACS on STN  
AB A review with 29 refs. on the distribution of phosphotransferase system (PTS)-sugars in B. subtilis, enzyme components of the PTS, and the amino acid sequences of three PTS enzymes **II** involved in **sucrose** metab.

L3 ANSWER 5 OF 7 LIFESCI COPYRIGHT 2003 CSA on STN DUPLICATE 3  
AB Toluene-treated cells of Selenomonas ruminantium HD4 used phosphoenolpyruvate (PEP) to phosphorylate glucose and sucrose. Glucose activity was constitutive, while phosphorylation of sucrose was inducible. Competition experiments indicated that separate phosphotransferase (PTS) enzymes **II** were present for glucose and **sucrose**, but it appeared that maltose was hydrolysed by an inducible extracellular maltase and then transported by the glucose PTS. S. ruminantium HD4 grew more slowly on maltose than glucose or sucrose and the specific activity of maltase was rate limiting. The maltase was competitively inhibited by glucose and sucrose. Xylose was not phosphorylated by PEP or ATP, and its uptake was inhibited by the protonophore carbonyl cyanide m-chlorophenylhydrazone (CCCP), and by chlorhexidine diacetate. The absence of PEP-dependent phosphorylation and the effects of CCCP suggested that xylose was transported by an active transport mechanism.

=>

=> dis his

(FILE 'HOME' ENTERED AT 21:07:10 ON 30 SEP 2003)

FILE 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCPLUS, NTIS, ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 21:07:27 ON 30 SEP 2003

L1 9200 S PTS (3A) II  
L2 20 S L1 (5A) SUCROSE  
L3 7 DUP REM L2 (13 DUPLICATES REMOVED)

=> log h  
COST IN U.S. DOLLARS

SINCE FILE ENTRY	TOTAL SESSION
62.77	62.98

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY	TOTAL SESSION
-1.30	-1.30

CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 21:27:58 ON 30 SEP 2003

[ExPASy Home page](#)[Site Map](#)[Search ExPASy](#)[Contact us](#)[ENZYME](#)

Search

Swiss-Prot/TrEMBL



for

Go

Clear

# Search in ENZYME for: pts ii

**Release 33, September 2003, and updates up to 28-Sep-2003**

Please choose one of the following entries:

2.7.1.69      Protein-N(pi)-phosphohistidine-sugar phosphotransferase.  
(AN: Enzyme II of the phosphotransferase system.  
PTS permease.  
PEP-sugar phosphotransferase enzyme II.)

[ExPASy Home page](#)[Site Map](#)[Search ExPASy](#)[Contact us](#)[ENZYME](#)